

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of processing an image in an image sensor, comprising the steps of:

dividing the sensor into at least ~~two~~ a first zone and a second zone[[s]] separated by a border, (ZD, ZG) using a sensor (CPT) each zone associated with a respective different processing pathway[[s]], with a view to ~~eliminating~~ eliminate the defects due to [[the]] differences between these pathways, in which [[one]] the first zone is regarded as reference zone and the associated processing pathway is regarded as reference pathway, and ~~another~~ the other pathway is regarded as, the so-called a pathway to be corrected;

using a correction table in the pathway to be corrected, said correction table having an input for receiving a signal level and an output for providing a respective corrected signal level for each value of signal level received on the input~~and matching each signal level on input to the table, with a corrected level on output from the table;~~

modifying iteratively the correction table, during each new use of the sensor

by measuring signal levels arising from the processing pathways for a group of border points around the border ~~between the two zones;~~

determining an abnormal divergence ~~between the measurements on either side of the border, this divergence being the consequence of an inappropriate correction of [[a]]~~

~~one particular signal level value by an input to the table;~~

~~storing-storing new values in the correction table for the one particular signal level value and for a series of several other signal input level[[s]] values [[[b)]]] of the correction table around the lone particular signal level [[[b1)]]] for which the correction is inappropriate;~~
; and

repeating the measuring, determining and storing steps for other groups of border points.

2. (previously presented) The method as claimed in claim 1, wherein the modifications performed are sufficiently small as to end up with a progressively stabilized table.

3. (currently amended) The method as claimed in claim 1, wherein the divergence is defined by ~~[[the]]~~ a discrepancy value between the value of the signal level supplied by the pathway to be corrected for a border point in the second zone and ~~[[the]]~~ an extrapolation of the values supplied by the reference pathway for neighboring points situated in the first zone on the other side of the border.

4. (currently amended) The method as claimed in claim 1, wherein a correction value equal to a fraction of the determined divergence is added to the previous content of the correction table for a series ~~the one particular signal level and for said several of input signal level[[s]] values~~ of the table around the one particular level value ~~for which the correction is inappropriate.~~

5. (currently amended) The method as claimed in claim 4, wherein the correction made to the content of the table ~~for said several signal level values~~ depends on

the ~~[[input]] level~~ value in the table, and is progressively decreasing down to zero for ~~[[input]] level[[s]]~~ values decreasing below the said one particular level for which an abnormal divergence is noted.

6. (currently amended) The method as claimed in claim 5, wherein the correction made to the content of the table ~~is constant for a series of input levels~~ said several signal level values is the same for those values of the table which are greater than or equal to the one particular level for which an abnormal divergence is noted.

7. (currently amended) The method as claimed in claim 4, wherein said several values comprise all signal level values in the table. ~~a correction is made to the content of the table for all the input levels of the table.~~

8. (Currently Amended) A device for electronic image capture, comprising:
using a matrix image sensor divided into at least two zones a first zone and a second zone separated by a border, said zones and supplying a digital value for each image point, this digital value being computed in a first processing pathway for the points of the first zone and in a second processing pathway for the points of the second zone, the processing pathways being at least partly distinct, the second processing pathway using balancing means for eliminating the visible defects engendered by the small differences existing between the two processing pathways, wherein ~~[[the]]~~ a balancing means comprise a digital conversion table ~~[[TC]]~~, said correction table having an input for receiving a signal level and an output for providing a respective corrected signal level for each value of signal level received on the input; to match each possible digital value of the second pathway with another digital value to minimize the influence of the differences

between-pathways, and means ~~[[[MC]]]~~ for dynamically modifying the content of this table on the basis of an analysis of a divergence between on the one hand the digital values of the signals arising from one processing pathway and corresponding to border points situated on one side of the border ~~between the zones~~ in the first zone and on the other hand the digital values of the signals arising from the other processing pathway and corresponding to border points situated on the other side of the border in the second zone, for any image observed while using the device, the modification being performed for a ~~whole-series-of one particular signal level~~ luminance-values-around-a luminance value for which an abnormal divergence is noted, and for several other signal level values of the correction table around the one particular signal level value.

9. (currently amended) The device for image capture as claimed in claim 8, comprising means for calculating a divergence value $E = 2a_1 - a_2 - b_1$ where a_1 and a_2 are signal level values for two points in the first zone close to the border and b_1 is a corrected value for a corresponding point in the second zone, close to said two points ~~on the basis of the digital values and arising from a processing pathway and corresponding to two points on one side of the border and a digital value arising from the other processing pathway and corresponding to a point situated immediately on the other side of the border.~~

10. (currently amended) The device as claimed in claim 9, comprising means for writing into the correction table, for $[[a]]$ said several signal level values ~~series of input values i of the table, $[[a]]$ corrected contents which are corrected with respect to the equal to a previous content at the same address plus, the correction being equal to a fraction of the divergence value.~~

11. (currently amended) The device as claimed in claim 10, wherein said fraction is constant for the signal level values above the one particular signal level value and is progressively decreasing down to zero for level values decreasing below the said one particular level. ~~comprising means for correcting the content of the table by a value for the values of i greater than b_i' and by a value progressively decreasing from kE for the values of i less than b_i' .~~

12. (currently amended) The device as claimed in claim 11, ~~said several values comprise all signal level values in the table. comprising means for correcting the whole table when a divergence is detected for a group of border points.~~

13. (currently amended): The ~~device~~ method as claimed in claim 2, wherein the divergence is defined by ~~[[the]]~~ a discrepancy value between the value of the signal supplied by the pathway to be corrected for a border point in the second zone and ~~[[the]]~~ an extrapolation of the values supplied by the reference pathway for neighboring points situated in the first zone on the other side of the border.

14. (currently amended): The ~~device~~ method as claimed in claim 3, wherein a correction value equal to a fraction of the determined divergence is added to the previous content of the correction table for the one particular signal level value and for said several signal level values of the table around the one particular level value. ~~a series of input levels of the table around the level for which the correction is inappropriate.~~

15. (currently amended): The ~~device~~ method as claimed in claim 5, wherein said several values comprise all signal level values in the table. ~~a correction is made to the content of the table for all the input levels of the table.~~

16. (currently amended): The ~~device~~ method as claimed in claim 6, wherein said several values comprise all signal level values in the table. ~~a correction is made to the content of the table for all the input levels of the table.~~

17. (currently amended): The ~~device~~ method as claimed in claim 2, wherein a correction value equal to a fraction of the determined divergence is added to the previous content of the correction table for the one particular signal level value and for said several signal level values of the table around the one particular level value. ~~a series of input levels of the table around the level for which the correction is inappropriate.--~~